



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**TRANSMITTAL LETTER (Large Entity)**

Application Number: 09/447,284

Group Art Unit: 2617

Filed: November 23, 1999

Examiner Name: Ly

Applicant: Cao et al.

Attorney Docket Number: Cao 2-2-11-11-6

TITLE: CORDLESS TELEPHONE WITH MP3 PLAYER CAPABILITY

Total Number of Pages in this Submission: 60

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SIR:

Transmitted herewith is  
An Appeal Brief in the above-identified application (20 Pages filed in triplicate)  
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Respectfully submitted,

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**



Serial No.: 09/447,284  
Filed: November 23, 2009  
Group Art Unit: 2617  
Examiner: Ly, Nghi H  
Attorney Docket No.: Cao 2-2-11-11-6  
Our Ref.: 73-634

In re Patent Application of:

**CAO**

Title: **CORDLESS TELEPHONE WITH MP3 PLAYER CAPABILITY**

July 18, 2006

**APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Applicants submit herewith the following Appeal Brief in triplicate as required by 37 C.F.R. § 1.192.

**(1) REAL PARTY IN INTEREST**

The real party in interest is Agere Systems Inc.

**(2) RELATED APPEALS AND INTERFERENCES**

The Applicants and their legal representatives and assignee are not aware of any other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the appealing appeal.

**(3) STATUS OF THE CLAIMS**

Claims 1, 2, 4, 5, 9, 10, 14, 15, 19, 20, 24, 25, 28 and 29 are pending in this application. Claims 1, 2, 4, 5, 9, 10, 14, 15, 19, 20, 24, 25, 28 and 29 stand rejected.

**(4) STATUS OF ANY AMENDMENT FILED SUBSEQUENT TO FINAL REJECTION**

A Request for Reconsideration filed April 6, 2006 was indicated by the Examiner as being entered.

**(5) SUMMARY OF THE CLAIMED SUBJECT MATTER**

Cordless telephones having a remote handset and a base unit are known in the art. Typically, the base unit is powered by conventional AC current from a household electrical outlet, and the remote handset operates using battery power. To recharge the battery in the remote handset, the remote handset is inserted into a cradle in the base unit for recharging using the AC current of the base unit. However, the remote handset may be separated from the base unit for extended periods of time, allowing the user to carry the remote handset with them as they move about their residence or other locale.

Cordless telephones have been conventionally limited to conversational use, e.g., for establishing a telephone call, or for providing intercom communications between a remote handset and its base unit. For MP3 player functionality outside of cordless telephony, a user is required to obtain a separate device, and carry around both. While portable devices are useful, there is a point at which a user must decide between which portable devices to carry around at any one time, resulting in use of either the cordless telephone or the other portable device.

Applicants' claimed features overcome a deficiency associated with having to carry a plurality of portable devices to answer calls from a PSTN and listen to MP3 music. Applicants' claimed features overcome a deficiency within the art by integrating MP3 player capability into a cordless telephone to eliminate

a user from having to carry a plurality of portable devices and easing answering of telephone calls received over a Public Switched Telephone Network (PSTN).

**(6) GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

(A) Whether claims 15, 25 and 28 are obvious under 35 U.S.C. § 103(a) over U.S. Patent No. 6,556,965 to Borland *et al.* ("Borland") in view of U.S. Patent No. 6,697,944 to Jones *et al.* ("Jones").

(B) Whether claims 1, 2, 4, 5 and 29 are obvious under 35 U.S.C. § 103(a) obvious over Borland in view of International Publication Number WO 99143136 to Rydbeck *et al.* ("Rydbeck").

(C) Whether claims 14 and 24 are obvious under 35 U.S.C. § 103(a) over Borland in view of Jones, and further in view of U.S. Patent No. 6,430,530 to Ng ("Ng").

(D) Whether claims 9, 10, 19 and 20 are obvious under 35 U.S.C. § 103(a) over Borland in view of U.S. Patent No. 5,978,689 to Tuoriniemi *et al.* ("Tuoriniemi").

**(7) WHETHER THE CLAIMS STAND OR FALL TOGETHER**

Group I: Claims 15, 25 and 28 stand or fall together because each includes the following distinctive features:

- (1) downloading a digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source accessible by the remote handset via an Internet..

Group II: Claims 1, 2, 4, 5 and 29 stand or fall together because each includes the following distinctive features:

- (1) a remote handset of a cordless telephone that can switch between performing as a telephony device and performing as an MPEG audio player.

Group III: Claims 14 and 24 stand or fall together because each includes the following distinctive features:

- (1) downloading digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source.

Group IV: Claims 9, 10, 19 and 20 stand or fall together because each includes the following distinctive features:

- (1) muting a playing of a pre-loaded MP3 music when a remote handset of a cordless telephone is active in a current telephone call.

(8) **ARGUMENTS WITH RESPECT TO THE ISSUES PRESENTED FOR REVIEW**

- (A) Claims 15, 25 and 28 are not obvious under 35 U.S.C. § 103(a) over Borland in view of Jones.

All rejected claims 15, 25 and 28 recite downloading a digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source accessible by the remote handset via an Internet.

The Examiner acknowledged that Borland fails to disclose “downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source.” (See Office Action, page 3). However, the full claimed feature is “downloading a digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source accessible by the remote handset via an Internet”.

Examiner relied on Jones to allegedly make up for the deficiencies in Borland to arrive at the claimed invention. In particular, the Examiner alleges Jones “teaches downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source.” at col. 10, lines 9-14. The Examiner later clarified that the Examiner really means to rely on Jones at Fig. 3 to disclose downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source” (See Office Action, page 10).

Jones at col. 11, lines 18-44 and in Fig. 3 appears to disclose a portable device that is used to directly download a digital content file through the

Internet. However, Jones fails to disclose or suggest any application to a remote handset of a cordless telephone, the full claim limitation, much less disclose downloading a digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source accessible by the remote handset via an Internet, as recited by claims 15, 25 and 28.

The Examiner alleged that the motivation to modify Borland with the disclosure of Jones is “to ensure proper protection and prevent unauthorized duplication thereof (see Jones, column 1, lines 8-14)” (See Office Action, page 3). The Applicants are unsure of how modifying Borland to “downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source” would “ensure proper protection and prevent unauthorized duplication thereof”. The Examiner has failed to show how the alleged modification would have such a benefit in Borland. In fact, nothing about the alleged modification of Borland would result in the benefit described by the Examiner. It is the entire disclosure of Jones that results in such a benefit not simply “downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source”. Once such content would be downloaded into the allegedly modified Borland, such content could still be easily duplicated, providing no proper protection. Thus, the particular feature that the Examiner points to in Jones has nothing to do with ensuring “proper protection and prevent unauthorized duplication thereof”.

Moreover, the Examiner is modifying Borland with the disclosure of Jones. The Examiner cites why Jones allegedly uses a particular feature. However, it would be the obviousness of modifying Borland that is at issue, not why Jones relies on such a features. The Examiner failed to provide motivation why one of ordinary skill in the art would be motivated to modify Borland in the manner alleged by the Examiner. “Teachings of references can be combined only if there is some suggestion or incentive to do so.” *In re Fine*, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting *ACS Hosp. Sys. v. Montefiore Hosp.*, 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). Nothing within Borland and/or within Jones suggests the alleged modification of Borland.

Moreover, the Examiner appeared correct that Jones discloses “downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source”. However, Jones fails to disclose or suggest application of such a features to a cordless telephone, much less to a remote handset of a cordless telephone, as recited by claims 15, 25 and 28.

Moreover, the Examiner argued that Borland’s invention “can perform as an MPEG audio player” (See Office Action, page 10). However, as Applicants previously pointed out, Borland relies on MPEG audio compression for the basic operation of telephone conversations. Thus Borland’s invention must perform as an MPEG audio player for telephone functionality. Borland fails to disclose or suggest connection of a telephone to anything other than a telephone network. Thus, nothing within Borland nor Jones suggests modification of a telephone device to connect to the Internet, much less for downloading a digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source accessible by the remote handset via an Internet, as recited by claims 15, 25 and 28.

Moreover, all rejected claims 15, 25 and 28 recite digital bit stream music and a remote bit stream audio source.

Streaming of digital audio data between to an audio player is a term of art. Neither Borland nor Jones disclose streaming music to a remote handset of a cordless telephone, much less downloading a digital bit stream music comprised in an MPEG format to a remote handset of a cordless telephone directly from a remote bit stream audio source accessible by the remote handset via an Internet, as recited by claims 15, 25 and 28.

Thus, Borland modified by Jones, even if it were an obvious modification of Borland which it is not as discussed above, fails to disclose or suggest downloading a digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source accessible by the remote handset via an Internet, as recited by claims 15, 25 and 28.

The Applicants claimed features have significant advantages over the cited prior art. The Examiner cites a cellular telephone that has MP3

capability. However, a user using the cellular telephone to listen to MP3 music would not be able to hear ringing from a cordless telephone receiving a call from a PSTN, i.e., most likely missing the call if listening to MP3 music with their cellular telephone. Applicant's claimed features assist a user from missing calls received over a PSTN by requiring a remote handset to be with them while listening to bit stream audio. Downloading a digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source accessible by the remote handset via an Internet. allows a user to listen to their MP3 files while having a cordless telephone conveniently located to be able to answer calls received over a PSTN. Neither Borland nor Jones disclose or suggest the claimed features having such benefits and advantages over the cited prior art.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Borland in view of Jones does not render obvious any of claims 15, 25 and 28. Thus, the rejection of claims 15, 25 and 28 under 35 U.S.C. § 103(a) is improper and should be reversed.

(B) Claims 1, 2, 4, 5 and 29 are not obvious under 35 U.S.C. § 103(a) over Borland in view of Rydbeck.

All rejected claims 1, 2, 4, 5 and 29 require a remote handset of a cordless telephone that can switch between performing as a telephony device and performing as an MPEG audio player.

The Examiner repeatedly argued that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. However, Applicants clearly argued that modification of Borland with Rydbeck, i.e., the combination of references, fails to disclose or suggest the claimed features.

Moreover, the Examiner's motivation to modify Borland with the disclosure of Rydbeck is "to prevent telephone conversations from interfering with audio sounds". However, the Examiner has failed to show that Borland has



a problem with telephone conversations interfering with audio sounds that needs some modification of Borland to fix the problem. “Teachings of references can be combined only if there is some suggestion or incentive to do so.” *In re Fine*, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting *ACS Hosp. Sys. v. Montefiore Hosp.*, 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original).

Moreover, nothing within Borland and/or Rydbeck suggest modifying Borland in the manner alleged by the Examiner. Borland’s invention is directed toward audio compression, i.e., MPEG audio compression, for telephone functionality. Nothing within Borland and/or Rydbeck suggests modifying Borland in the manner alleged by the Examiner, i.e., nothing within Borland and/or Rydbeck suggests modifying Borland to switch between any two functions, much less to modifying Borland to switch between performing as a telephony device and performing as an MPEG audio player, as recited by claims 1, 2, 4, 5 and 29.

Moreover, the Examiner failed to refute the fact, as Applicants previous pointed out, that modification of Borland to switched out of an MPEG mode would disable Borland’s invention since the Borland’s MPEG mode is the telephone mode. Borland’s MPEG audio player is the same as the telephone mode. Thus, modification of Borland that relies on an MPEG mode for its basic operation as a telephone to switch out of an MPEG mode would render Borland’s invention useless. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. MPEP §2141.02, page 2100-127 (Rev. 2, May 2004) (citing *W.L. Gore & Assoc. v. Garlock, Inc.*, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)).

As discussed above, the Examiner failed to refute the fact, as Applicants previous pointed out, that modifying Borland to switch from an MPEG audio mode would leave a telephone without function since the telephone relies on MPEG audio for its basic functions. The Examiner’s modification of Borlan would destroy the invention of Borland and would therefore be improper. See *Ex parte Hartman*, 186 U.S.P.Q. 336, 337 (P.T.O.B.O.A. 1974) (reversing rejection when modification would destroy basis for invention in one or two references).

Moreover, the Examiner failed to refute the fact, as Applicants previous pointed out, Rydbeck discloses a cellular telephone that includes an internally integrated digital entertainment module (Abstract). Audio is played back through a headset while a user engages in leisure activities and automatically mutes or stops playback of the audio until a call is terminated (See Rydbeck, page 7, lines 4-8). A cellular telephone is not a remote handset of a cordless telephone. Rydbeck fails to disclose or suggest application of any of the features disclosed for a cordless telephone, much less a remote handset of a cordless telephone. As discussed above, “Teachings of references can be combined only if there is some suggestion or incentive to do so.” *In re Fine*, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting *ACS Hosp. Sys. v. Montefiore Hosp.*, 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original).

Thus, modifying Borland with the disclosure of Rydbeck would still fail to disclose or suggest a remote handset of a cordless telephone that can switch between performing as a telephony device and performing as an MPEG audio player, as recited by claims 1, 2, 4, 5 and 29.

Moreover, the Applicants claimed features have significant advantages over the cited prior art. Rydbeck discloses a cellular telephone that has MP3 capability. However, a user using the cellular telephone to listen to MP3 music would not be able to hear ringing from a cordless telephone receiving a call from a PSTN, i.e., most likely missing the call if listening to MP3 music with their cellular telephone. Applicant’s claimed features prevent a user from missing calls received over a PSTN. An MPEG audio/MP3 player that can switch between performing as an telephone and as an MPEG audio/MP3 player allows a user to listen to their MP3 files while still being able to answer calls received over a PSTN. Neither Borland nor Rydbeck disclose or suggest the claimed features having such benefits and advantages over the cited prior art.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Borland in view of Rydbeck does not render obvious any of claims 1, 2, 4, 5 and

29. Thus, the rejection of claims 1, 2, 4, 5 and 29 under 35 U.S.C. § 103(a) is improper and should be reversed.

(C) Claims 14 and 24 are not obvious under 35 U.S.C. § 103(a) over Borland in view of Jones and Ng.

All rejected claims 14 and 24 recite downloading digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source.

The Examiner acknowledged that Borland fails to “disclose downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source.” The Examiner relies on Jones and Ng to allegedly make up for the deficiencies in Borland to arrive at the claimed features. The Applicants respectfully disagree.

The Examiner relies on Jones to disclose “downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source” at col. 10, lines 9-14. However, as discussed above, Jones discloses an MP3 player that directly downloads music files from a remote source. However, Jones fails to even mention download of digital bit stream music to a telephony device, much less to a remote handset of a cordless telephone, i.e., downloading digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source, as recited by claims 14 and 24.

As discussed above, the Examiner alleges that the motivation to modify Borland with the disclosure of Jones is “to ensure proper protection and prevent unauthorized duplication thereof (see Jones, column 1, lines 8-14)” (See Office Action, page 6). The Applicants are unsure of how modifying Borland to “downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source” would “ensure proper protection and prevent unauthorized duplication thereof”. The Examiner has failed to show how the alleged modification would have such a benefit in Borland. In fact, nothing about the alleged modification of Borland would result in the benefit described by the

Examiner. It is the entire disclosure of Jones that results in such a benefit NOT simply “downloading digital bit stream music comprised in an MPEG format directly from a remote bit stream audio source”. Once such content would be downloaded into the allegedly modified Borland, such content could still be easily duplicated, providing no proper protection. Thus, the particular feature that the Examiner points to in Jones has nothing to do with ensuring “proper protection and prevent unauthorized duplication thereof”.

Ng was relied on to disclose “an MPEG format is stored in memory”. However, NG fails to disclose or suggest application to a cordless telephone. Thus, modifying Borland with the disclosures of Jones and Ng would still fail to disclose or suggest downloading digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source, as recited by claims 14 and 24.

Moreover, Borland is the only reference of the three references relied on to reject claims 14 and 24 that has any relevance to a cordless telephone. None of the relied on references disclose or suggest modifying a cordless telephone in any way, much less to perform downloading digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source. As discussed above, “Teachings of references can be combined only if there is some suggestion or incentive to do so.” *In re Fine*, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting *ACS Hosp. Sys. v. Montefiore Hosp.*, 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original).

Thus, even it were obvious to modify Borland with the disclosure of Jones and Ng, which it is not as discussed above, the theoretically modified Borland would still fail to disclose or suggest downloading digital bit stream music comprised in an MPEG format to a remote handset directly from a remote bit stream audio source, as recited by claims 14 and 24.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Borland in view of Jones and Ng does not render obvious any of claims 14 and

24. Thus, the rejection of claims 14 and 24 under 35 U.S.C. § 103(a) is improper and should be reversed.

(D) Claims 9, 10, 19 and 20 are not obvious under 35 U.S.C. § 103(a) over Borland in view of Tuoriniemi.

All rejected claims 9, 10, 19 and 20 recite muting a playing of a pre-loaded MP3 music when a remote handset of a cordless telephone is active in a current telephone call.

The Examiner repeatedly argued that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. However, "Teachings of references can be combined only if there is some suggestion or incentive to do so." In *re* Fine, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting *ACS Hosp. Sys. v. Montefiore Hosp.*, 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). The Applicants previously argued and the Examiner failed to refute that modification of Borland in the manner suggested by the Examiner would leave Borland's invention useless. Modification of Borland to mute playing of a pre-loaded MP3 music when a remote handset of a cordless telephone is active in a current telephone call would disable Borland's invention since the MP3 mode is the telephone mode. Thus, modification of Borland as the Examiner suggests that relies on an MPEG mode for its most basic operation for telephone operation would render Borland's invention useless. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. MPEP §2141.02, page 2100-127 (Rev. 2, May 2004) (citing *W.L. Gore & Assoc. v. Garlock, Inc.*, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)).

The Examiner relied on Tuoriniemi to allegedly make up for the deficiencies in Borland to arrive at the claimed features. The Applicants respectfully disagree.

Tuoriniemi discloses a personal communication and audio set that is able to play a stored digital audio program (see Fig. 1; col. 9, lines 17-20).

Tuoriniemi discloses a cordless telephone within the background of the invention, however, Tuoriniemi's invention is directed to a personal communication and audio set that does not have the shortcomings associated with a cordless telephone. Thus, the Examiner failed to refute Tuoriniemi teaches away from applying any teachings to a cordless telephone. MPEP §2141.02, page 2100-127 (Rev. 2, May 2004) (citing *W.L. Gore & Assoc. v. Garlock, Inc.*, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)). Tuoriniemi's playing a stored digital audio program from a personal communication and audio set is not playing MP3 music from a remote handset of a cordless telephone, much less muting the playing of a pre-loaded MP3 music when the remote handset is active in a current telephone call, as recited by claims 9, 10, 19 and 20.

Moreover, Borland discloses the use of MPEG compression for a telephone conversation. The Examiner failed to refute the fact that modifying Borland to mute an MPEG formatted signal, as disclosed by Tuoriniemi, would result in muting a telephone conversation, which is nonsensical since it is the telephone conversation that the user of a remote handset would want to hear. See *Ex parte Hartman*, 186 U.S.P.Q. 336, 337 (P.T.O.B.O.A. 1974) (reversing rejection when modification would destroy basis for invention in one or two references). Therefore, the rejection should be withdrawn.

Thus, even if it were obvious to modify Borland with the disclosure of Tuoriniemi, which it is not as discussed above, the theoretically modified Borland would still fail to disclose or suggest playing MP3 music from a remote handset of a cordless telephone and muting the playing of a pre-loaded MP3 music when the remote handset is active in a current telephone call, as recited by claims 9, 10, 19 and 20.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Borland in view of Tuoriniemi does not render obvious any of claims 9, 10, 19 and 20. Thus, the rejection of claims 9, 10, 19 and 20 under 35 U.S.C. § 103(a) is improper and should be reversed.

**CONCLUSION**

For all the reasons set forth above, the rejections of claims 1, 2, 4, 5, 9, 10, 14, 15, 19, 20, 24, 25, 28 and 29 are improper and should be reversed. The Applicants therefore respectfully request that this Appeal be granted and that the rejections of the claims be reversed.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'W. H. Bollman', written over a horizontal line.

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## APPENDIX

### CLAIMS INVOLVED IN THE APPEAL

1. An apparatus for receiving a digital audio broadcast signal, comprising:

a plurality of antenna elements each centered on a different part of a sky to maximize a signal strength of a digital audio broadcast signal received from a satellite; and

a received signal strength indicator receiving a digital audio broadcast signal from each of said plurality of antenna elements to monitor said signal strength from any of said plurality of antenna elements.

3. The apparatus for receiving a digital audio broadcast according to claim 1, wherein:

said digital audio broadcast signal is a satellite digital audio broadcast signal.

4. The apparatus for receiving a digital audio broadcast according to claim 1, further comprising:

a switch selector to select one of said plurality of antenna elements receiving said digital audio broadcast signal with a largest signal strength in response to a determination by said received signal strength indicator.

5. The apparatus according to claim 4, further comprising:

a low noise amplifier to amplify an output of said switch selector.

6. The apparatus for receiving a digital audio broadcast according to claim 5, further comprising:

a receiver to convert an output of said low noise amplifier an audible signal for a user.



7. The apparatus for receiving a digital audio broadcast according to claim 4, wherein:

said received signal strength indicator substantially simultaneously receives a digital audio broadcast signal from each of said plurality of antenna elements.

8. The apparatus for receiving a digital audio broadcast according to claim 4, wherein:

said received signal strength indicator sequentially receives a digital audio broadcast signal from each of said plurality of antenna elements

9. The apparatus for receiving a digital audio broadcast according to claim 4, further comprising:

a Butler matrix connected to each of said plurality of antenna elements.

10. An apparatus for receiving a digital audio broadcast signal, comprising:

a plurality of antenna elements each centered on a different part of a sky to maximize a signal strength of a digital audio broadcast signal received from a satellite; and

a Butler matrix to perform a transformation on an output signal from each of said plurality of antenna elements, and to select one of said plurality of antenna elements outputting a digital audio broadcast signal with a largest signal strength based on said transformation.

11. The apparatus for receiving a digital audio broadcast signal according to claim 10, further comprising:

a switch selector to select one of a plurality of output taps from said Butler matrix corresponding to said one of said plurality of antenna elements outputting said digital audio broadcast signal with said largest signal strength.

12. The apparatus for receiving a digital audio broadcast signal according to claim 11, further comprising:

a low noise amplifier to amplify said selected digital audio broadcast signal.

13. The apparatus for receiving a digital audio broadcast signal according to claim 12, further comprising:

a receiver to convert an output from said low noise amplifier to an audible signal for a user.

14. A method of receiving a digital audio broadcast signal, comprising:

receiving a digital audio broadcast signal from each of a plurality of antenna elements each centered on a different part of a sky from a satellite;

monitoring a received signal strength indicator of a signal received by each of said plurality of antenna elements; and

selecting one of said plurality of antenna elements based on an output from said monitored received signal strength indicator to maximize said digital audio broadcast signal received from said satellite.

15. The method of receiving a digital audio broadcast signal according to claim 14, further comprising:

converting an output from said received signal strength indicator to an audible digital audio broadcast signal for a user.

16. A method of receiving a digital audio broadcast signal, comprising:

receiving a digital audio broadcast signal from a satellite, said digital audio broadcast signal being captured by each of a plurality of antenna elements each centered on a different part of the sky;

transforming each captured copy of said digital audio broadcast signal; and

selecting one of said plurality of antenna elements having a largest signal strength based on said transformation to maximize said digital audio broadcast signal received from said satellite.

17. The method of receiving a digital audio broadcast signal according to claim 16, wherein:

said selection made from a plurality of output taps from a Butler matrix.

18. The method of receiving a digital audio broadcast signal according to claim 17, further comprising:

amplifying a digital audio broadcast signal from said selected one of said plurality of antennas.

19. The method of receiving a digital audio broadcast signal according to claim 18, further comprising:

converting said amplified digital audio broadcast signal into an audible digital audio amplified signal for a user.

20. An apparatus for receiving a digital audio broadcast signal, comprising:

means for receiving a digital audio broadcast signal from a satellite, said digital audio broadcast signal being captured by each of a plurality of antenna elements each centered on a different part of the sky;

means for transforming each captured copy of said digital audio broadcast signal; and

means for selecting one of said plurality of antenna elements having a largest signal strength based on a transformation output by said means for transforming, to maximize said digital audio broadcast signal received from said satellite.

21. The apparatus for receiving a digital audio broadcast signal according to claim 20, wherein:

said selection made from a plurality of output taps from a Butler matrix.

22. The apparatus for receiving a digital audio broadcast signal according to claim 21, further comprising:

means for amplifying a digital audio broadcast signal from said selected one of said plurality of antennas.

23. The apparatus for receiving a digital audio broadcast signal according to claim 22, further comprising:

means for converting said amplified digital audio broadcast signal into an audible digital audio amplified signal for a user.

24. An apparatus for receiving a digital audio broadcast signal, comprising:

means for receiving a digital audio broadcast signal from a satellite by each of a plurality of antenna elements each centered on a different part of a sky;

means for monitoring a received signal strength indicator of a signal output from each of said plurality of antenna elements; and

means for selecting one of said plurality of antenna elements based on an output from said monitored received signal strength indicator to maximize said digital audio broadcast signal received from said satellite.

25. The apparatus of receiving a digital audio broadcast signal according to claim 24, further comprising:

means for converting an output from said received signal strength indicator to an audible digital audio broadcast signal for a user.